

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A disk cartridge ejection mechanism for moving a disk cartridge from a loaded position ~~thereof~~ in which information is recorded in and reproduced from a recording medium inside the disk cartridge, to a removal position in which the disk cartridge can be taken out from an ~~[[image]]~~ information recording and reproducing apparatus, the disk cartridge ejection mechanism comprising:

[[a)] a cartridge engagement device for engaging with the disk cartridge to ~~inhibiting~~ inhibit the disk cartridge from moving beyond the removal position, ~~[[when]]~~ while the disk cartridge is moved from the loaded position to the removal position;

[[b)] a cartridge engagement ~~auxiliary~~ assistance device movable between a release position at which a release of an engagement of the cartridge engagement device with the disk cartridge is allowed, and a prevention position at which the release of the engagement of the cartridge engagement device with the disk cartridge is prevented, for preventing a release of engagement of the cartridge engagement device with the disk cartridge, wherein while ~~[[when]]~~ the disk cartridge is moved from the loaded position to the removal position the cartridge engagement assistance device is situated in the prevention position; and

~~(c)-an auxiliary~~ a releasing member device for moving the cartridge engagement assistance device from the prevention position to the release position ~~for releasing a state in which the cartridge engagement auxiliary device prevents the release of the~~

~~engagement of the cartridge engagement device with the disk cartridge~~, after the disk cartridge is moved from the loaded position to the removal position.

2. (Original) The disk cartridge ejection mechanism of claim 1, further comprising:

an urging member for urging the disk cartridge toward an ejection direction; and  
a locking member for inhibiting the disk cartridge from moving at the loaded position thereof; and

a lock releasing device for releasing the locking member.

3. (Currently Amended) The disk cartridge ejection mechanism of claim 1, wherein the cartridge engagement device comprises an elastic arm having a protrusion to engage with a concave portion of the disk cartridge, and the cartridge engagement ~~auxiliary~~ assistance device comprises a lock arm for coming in contact with a surface on an opposite side of a surface where the protrusion of the elastic arm is provided.

4. (Currently Amended) The disk cartridge ejection mechanism of claim 3, wherein the cartridge engagement ~~auxiliary~~ assistance device comprises:

a plate on which the lock arm is rotatably provided; and

a lock arm urging member for urging the lock arm toward the elastic arm.

5. (Currently Amended) The disk cartridge ejection mechanism of claim 4, wherein the plate of the cartridge engagement ~~auxiliary~~ assistance device is

provided movably in the ejection direction of the disk cartridge, and comprises a plate guide for guiding the plate between a position in which the elastic arm is in contact with the lock arm and a position in which the elastic arm is not in contact with the lock arm,

wherein the lock releasing device comprises an ejection motor, and an eccentric pin driven and rotated by the ejection motor for releasing the locking member and the cartridge engagement ~~auxiliary~~ assistance device, and

wherein when the ejection motor is driven, the eccentric pin releases the locking member, the urging member moves the disk cartridge from the loaded position toward the removal position by urging force, and moves the plate of the cartridge engagement ~~auxiliary~~ assistance device to the position in which the elastic arm is not in contact with the lock arm, after the disk cartridge reaches the removal position.

6. (Currently Amended) A disk cartridge ejection method for moving a disk cartridge from a loaded position thereof in which information is recorded in and reproduced from a recording medium inside the disk cartridge, to a removal position thereof in which the disk cartridge can be taken out from an ~~[[image]]~~ information recording and reproducing apparatus, the disk cartridge ejection method comprising:

~~[[a]]~~ holding the disk cartridge with a first holding force by which the disk cartridge is not moved further than the removal position by applying an additional urging force to the disk cartridge at least ~~[[when]]~~ while the disk cartridge is moved from the loaded position to the removal position; and

[[[b)]] thereafter holding the disk cartridge with a second holding force that is smaller than the first holding force by removing the additional urging force, after the disk cartridge is moved from the loaded position to the removal position.

7. (New) The disk cartridge ejection mechanism of claim 1, wherein the cartridge engagement assistance device comprises an urging member for urging the cartridge engagement assistance device toward the prevention position so that a moving load toward the release position of the cartridge engagement device is increased.

8. (New) The disk cartridge ejection mechanism of claim 1, wherein the cartridge engagement assistance device applies an additional urging force to the cartridge engagement device to prevent the release of the engagement of the cartridge engagement device with the disk cartridge while the disk cartridge is moved from the loaded position to the removal position, and

wherein the cartridge engagement assistance device removes the additional urging force to the cartridge engagement device after the disk cartridge is moved from the loaded position to the removal position.

9. (New) The disk cartridge ejection mechanism of claim 8, wherein the cartridge engagement assistance device comes into contact with the cartridge engagement device to apply the additional urging force to the cartridge engagement device.

10. (New) An information recording and reproducing apparatus, comprising:  
a disk cartridge ejection mechanism for moving a disk cartridge from a loaded position in which information is recorded in and reproduced from a recording medium inside the disk cartridge, to a removal position in which the disk cartridge can be taken out from the information recording and reproducing apparatus, the disk cartridge ejection mechanism comprising:

a cartridge engagement device for engaging with the disk cartridge to inhibit the disk cartridge from moving beyond the removal position, while the disk cartridge is moved from the loaded position to the removal position;

a cartridge engagement assistance device movable between a release position at which a release of an engagement of the cartridge engagement device with the disk cartridge is allowed, and a prevention position at which the release of the engagement of the cartridge engagement device with the disk cartridge is prevented,

wherein while the disk cartridge is moved from the loaded position to the removal position, the cartridge engagement assistance device is situated in the prevention position; and

a releasing device for moving the cartridge engagement assistance device from the prevention position to the release position, after the disk cartridge is moved from the loaded position to the removal position.